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| 09/960,359 | 09/24/2001 | Yeong Jong Shin | K-262 | 6347 |
| 34610 | 7590 | 06/28/2006 | EXAMINER | |
| FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153 | | | GELIN, JEAN ALLAND | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2617 | |

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,359

Applicant(s)

SHIN, YEONG JONG

Examiner

Jean A. Gelin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25, 27-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to the Applicant's amendment and arguments filed April 13, 2006 in which claims 1, 5, 14-21 have been amended, claim 26 has been canceled, and claim 27 has been added. Claims 1-25, and 27 are currently pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 21-25, and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Alperovich (US PAT. 6,317,609).

Regarding claim 21, Alperovich discloses a method for setting up a real time data call in a mobile communication system comprising the steps of setting up a call between an originating side mobile station (20a figure 4) and a termination side mobile station (20b, figure 4), transferring bearer information (420, figure 4) along control paths (440, figure 4) between an origination base station controller (23a, figure 4) and a termination base station controller (23b, fig. 4) through the set up call to set up a bearer path (230, figure 4) between the origination base station controller and termination base station controller, portion of the control paths (440, figure 4) different than the bearer path (230,

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figure 4), transferring real time video data of at least one of the originating side mobile station and the termination side mobile station between the origination BSC and the termination BSC (col. 5 line 57 through col. 9 line 32 and col. 13 line 4 through col. 15 line 26). In addition, Alperovich teaches to send a request from the origination BSC to the MSC along the control path and sending a request from the MSC to the termination along one of the control paths for the termination number for a call, to set up a radio link between the termination BSC and the termination mobile station, and transferring bearer information of the termination BSC to the origination BSC, and transferring a response to the bearer information from the origination BSC to the termination BSC to form a bearer path (col. 5 line 10 to col. 6, line 66).

Regarding claims 22-23, the examiner takes an Official notice that it is old and notoriously well known in the art of retransmitting bearing information, i.e., training information, and response signal, i.e., acknowledgement, between termination device and the origination device when the bearing information and the response signal are not transferred within a prescribed period of time in order to secure training communication, wherein the retransmission is set to a prescribed number of time in order to limit the further attempts.

Regarding claims 24-25, Alperovich teaches the bearer information of the termination BSC comprising a bearer address of the terminal BSC and the response to the bearer information comprising a bearer address and synchronization information (col. 5 lines 15-42).

Regarding claim 28, Alperovich teaches the router can be separated from the MSC (col. 5, lines 43-56)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-17, 19-20, 27, and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich et al. (US PAT. 6,317,609 hereinafter Alperovich) in view of Friman (US PAT. 6,061,566).

Regarding claims 1, 14, and 29, Alperovich discloses a method for setting up a real time data call in a mobile communication system comprising transferring bearer information, i.e., control information, between the origination base station controller (23a, figure 4) and the termination base station controller (23b, figure 4) through the set up control path (230, figure 4); and transferring real time video data of at least one of the originating side mobile station (20a, figure 4) and the termination side mobile station (20b, figure 4) between the origination BSC (23a, figure 4) and the termination BSC (23b, figure 4) through the set up bearer path (440, fig. 4, col. 5 line 57 through col. 9 line 32 and col. 13 line 4 through col. 15 line 26) without using traffic resources of the MSC (i.e., the digital image is sent through the Internet to reduce the load on the cellular network such as the traffic channel of the MSC, col. 3, lines 33-53).

Alperovich teaches the transmission of images from first mobile station to a second mobile station wherein the first mobile corresponds to first BSC and the second mobile to a second BSC. But Alperovich differs from the claimed invention in not specifically teaching setting up a control path between an origination BSC, a termination BSC, and a MSC controlling the origination and the termination BSCs when a call is set up between an originating side mobile station and a termination side mobile station; setting up a bearer path between the origination BSC and the termination BSC by using the bearer information.

However, the preceding limitations are known in the art of communications. Friman teaches a first BSC is directly connected to a second BSC via a means for communication link 21, and the first and second BSC are under the control of a single mobile switching center (see fig. 2, col. 6, line 30 to col. 7, line 37). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the technique of Friman within the system of Alperovich in order that the first and second base station controllers switch a connection between the first and the second mobile stations directly via said direct link under control of the MSC. Thus, real time video data can be transferred through the communication link 21 without using the MSC, and the transmission delay is reduced.

Regarding claim 2, Alperovich teaches to set up the call comprising the steps of defining a new option for a real time video call related to a speech call and a data call, inputting a termination side number in the newly defined option to initiate a real time video data call and setting up origination and termination calls by the originating side

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and termination side mobile stations, the corresponding BSCS and the MSC (col. 4 line 64 through col. 5 line 9).

Regarding claim 3, Alperovich discloses only the bearer path and a control path being setup during the call set up and wherein no other traffic path is set up (figure 4). Regarding claim 4, Alperovich discloses the originating base station controller and the desirating base station controller defining a new service option for real time video data before the call is set up (col. 5 lines 17-29).

Regarding claim 5, Alperovich teaches to send a request from the MSC to the termination BSC for the termination number for a cal, to set up a radio link between the termination BSC and the termination mobile station, and transferring bearer information of the termination BSC to the origination BSC, and transferring a response to the bearer information form the origination BSC to the termination BSC to form a bearer path (col. 5 lines 30-42).

Regarding claims 6-7, the examiner takes an Official notice that it is old and notoriously well known in the art of retransmitting bearing information, i.e., training information, and response signal, i.e., acknowledgement, between termination device and the origination device when the bearing information and the response signal are not transferred within a prescribed period of time in order to secure training communication, wherein the retransmission is set to a prescribed number of time in order to limit the further attempts.

Regarding claims 8-9, Alperovich teaches the bearer information of the termination BSC comprising a bearer address of the terminal BSC and the response to

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the bearer information comprising a bearer address and synchronization information (col. 5 lines 15-42).

Regarding claims 10-12, Friman teaches to clear the call and bearer path after the real time video data has been transferred comprising the steps of signaling to the core network service node, i.e., the MSC, to clear the bearer path, transferring a clear command from the core network service node to the origination and termination BSCS, and sending a message from each of the origination and termination BSCS to inform the core network service node of completing of the clearing, wherein the control path channel being used for communication between each of the origination and termination BSCS and the core network service node (col. 7 lines 32-38).

Regarding claim 13, Alperovich discloses the video data being transferred over Internet so that one skill in the art would recognize the video data being transferred at a very high data rate, i.e., at a rate of at least 1 Mbps between each of the origination and termination BSCS and the core network service node (col. 5 lines 17-20).

Regarding claim 15, the limitations of the claim are rejected as the same reasons set forth in claim 13.

Regarding claims 16-17, Alperovich discloses the at least one origination device comprising an origination mobile terminal (20a, figure 14) and at least one origination base station transceiver (23a, figure 4) configured to form a radio interface with the origination mobile terminal, and at least one termination device comprising a termination mobile terminal (20b, figure 1 1A) and at least one termination base station

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transceiver (23b, figure 4) configured to form a radio interface with the termination mobile terminal.

Regarding claim 19, Alperovich discloses the mobile communication system having a home location register (26b, figure 4) for storing position information and processing position information of plurality of mobile stations within the network (col. 5 lines 43-57).

Regarding claim 20, the limitations of the claim are rejected as the same reasons set forth in claim 1.

Regarding claim 27, Alperovich teaches portions of the control paths (440, figure 4), which are different than the set up bearer path (230, figure 4).

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich et al. (US PAT. 6,317,609 hereinafter Alperovich) in view of Friman (US PAT. 6,061,566) as applied in claim 14 above, and further in view of Rollender (US PAT. 6,493,553).

The combination of Alperovich and Friman differs from the claimed invention in not specifically teaching the termination mobile terminal being identified by an international mobile subscription and wherein the least one origination device provides the IMSI to the router to establish the direct bearer channel to the termination mobile terminal. However, Rollender teaches to use international mobile subscription identifier to identify mobile terminal, and to complete a call (col. 1 line 23 through col. 2 line 2), thereby providing a secure communication. Therefore, it would have been obvious to a

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person of ordinary skill in the art at the time the invention was made to modify the combination of Alperovich and Friman in having the termination mobile terminal being identified by an international mobile subscription and wherein the least one origination device provides the IMSI to the router to establish the direct bearer channel to the termination mobile terminal, as per teaching of Rollender, in order to provide a secure communication.

Response to Arguments

7. Applicant's arguments with respect to claims 1-25 and 27-29 have been considered but are moot in view of the new ground(s) of rejection.

As per claims 1 and 14, the Applicant argues that Alperovich in view of Friman does not teach transferring real time video data of at least one of the originating side mobile station and the termination side mobile station between the origination BSC and the termination BSC through the set up bearer path without using traffic resources of the MSC. The Applicant further argues that Friman relates to an internal switch of a base station controller that may be switched when two mobile stations are located in the same area of the same base station system

The Examiner maintains Alperovich in view of Friman teaches all the limitations as mapped in the rejection above. Alperovich discloses the transmission of images from first mobile station to a second mobile station wherein the first mobile corresponds to first BSC and the second mobile to a second BSC (see rejection above). But Alperovich differs from the claimed invention in not specifically teaching setting up a control path

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between an origination BSC, a termination BSC, and a MSC controlling the origination and the termination BSCs when a call is set up between an originating side mobile station and a termination side mobile station; setting up a bearer path between the origination BSC and the termination BSC by using the bearer information.

However, the preceding limitations are known in the art of communications. Friman teaches a first BSC is directly connected to a second BSC via a means for communication link 21, and the first and second BSC are under the control of a single mobile switching center (see fig. 2, col. 6, line 30 to col. 7, line 37). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the technique of Friman within the system of Alperovich in order that the first and second base station controllers switch a connection between the first and the second mobile stations directly via said direct link under control of the MSC. Thus, real time video data can be transferred through the communication link 21 without using the MSC, and the transmission delay is reduced.

The Applicant further argues that the prior arts fail to disclose claim 21 as recited. However, the Examiner maintains that claim 21 is rejected for the same set forth in the rejection above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

| | | |
|----------|--------------|------------|
| Martinez | US 5,321,514 | 06/14/1994 |
| Hafner | US 3,706,996 | 12/19/1972 |

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A. Gelin whose telephone number is (571) 272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Banks-Harold Marsha can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JGelin
June 23, 2006

JEAN GELIN
PRIMARY EXAMINER

A handwritten signature in cursive script that reads "jean Allard Gelin". The signature is written in black ink and is positioned below the printed name and title.